

WHAT IS CLAIMED IS:

1. An information providing apparatus comprising:
reception means for receiving transmission
information to a user;
- 5 determination means for determining whether
contents of the transmission information received by
said reception means are displayable at a portable
terminal owned by the user;
- 10 sending means for sending the transmission
information to the portable terminal when said
determination means determines that the contents are
displayable;
- 15 decision means for deciding on the basis of user
information of the user a destination of the
transmission information received by said reception
means when said determination means determines that the
contents are not displayable;
- 20 designation means for designating conversion such
that data contained in the transmission information
matches a format of the destination; and
- 25 providing means for providing to the destination
data format-converted on the basis of designation of
said designation means.
2. The apparatus according to claim 1, wherein
the apparatus further comprises division means
for dividing the data contained in the transmission
information, depending on types of data,

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said designation means designates conversion such
that each data divided by said division means is
suitable for the format of the destination, and

said providing means integrates the respective
5 data format-converted on the basis of the designation
of said designation means and providing the resultant
data to the destination.

3. The apparatus according to claim 2, wherein the
transmission information is electronic mail, and the
10 data divided in accordance with the types are attached
files contained in the electronic mail.

4. The apparatus according to claim 1, wherein
the apparatus further comprises user information
retaining means for retaining user information
15 containing information about the portable terminal and
user information containing designation of the
destination of the transmission information,

said determination means determines on the basis
of the information about the portable terminal
20 registered in the user information whether the contents
of the transmission information received by said
reception means are displayable at the portable
terminal owned by the destination user, and

said decision means decides the destination of
25 the transmission information as a destination
designated by the user information when said
determination means determines that the contents are

not displayable.

5. The apparatus according to claim 4, further comprising setting means for setting the user information.

5 6. The apparatus according to claim 1, further comprising notification means for notifying the portable terminal of the destination user of a notification representing that data is transferred by said providing means.

10 7. The apparatus according to claim 2, wherein said designation means selects a conversion module for each data obtained by said division means, on the basis of a format of each data and a data format of the destination, and makes the selected conversion module
15 convert the data.

8. The apparatus according to claim 2, wherein said providing means integrates the respective converted data in accordance with a data order of the transmission information.

20 9. The apparatus according to claim 7, wherein when the destination is a World Wide Web information providing apparatus, said conversion module converts image data contained in the transmission information into JPEG data and converts wordprocessor document data
25 into HTML data.

10. The apparatus according to claim 7, wherein when the destination is a portable terminal, said conversion

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module converts image data contained in the
transmission information into a format displayable at
the portable terminal and converts wordprocessor
document data into text string data representing a
5 abstract of the document.

11. The apparatus according to claim 7, wherein when
the destination is a portable terminal and the number
of characters of a mail text contained in the
transmission information exceeds the number of
10 displayable characters of the portable terminal, said
conversion module converts the mail text into data
having the number of displayable characters.

12. The apparatus according to claim 11, wherein said
conversion module cuts a character string so that the
15 number of characters of the mail text is not more than
the number of displayable characters of the portable
terminal.

13. The apparatus according to claim 11, wherein said
conversion module prepares abstract from the mail text
20 such that the number of characters of the mail text is
not more than the number of displayable characters of
the portable terminal.

14. The apparatus according to claim 7, wherein when
the destination is a facsimile machine, said conversion
25 module converts mail text data, image data, and
wordprocessor document data contained in the
transmission information into facsimile data by CCITT

FAX encoding.

15. The apparatus according to claim 14, wherein
the apparatus further comprises cover page
generation means for generating cover page data
5 representing an address of a data destination, and
said providing means attaches the cover page data
to the facsimile data obtained by said conversion
module to obtain the output data.

16. The apparatus according to claim 7, further
10 comprising charging means for, when said conversion
module executes conversion which accrues charge,
executing charge processing.

17. The apparatus according to claim 16, further
comprising inhibiting means for, when a user sets to
15 inhibit charge, inhibiting conversion which accrues
charge.

18. The apparatus according to claim 1, wherein when
the destination is an apparatus for providing World
Wide Web information, said providing means retains the
20 output data accessible by a URL.

19. The apparatus according to claim 1, wherein when
the destination is a portable terminal, said providing
means retains the output data accessible by the
portable terminal.

20. The apparatus according to claim 1, wherein when
the destination is a facsimile machine, said providing
means transmits the output data to the facsimile

machine.

21. An information providing system comprising:
transmission means for transmitting desired
information as transmission information;

5 determination means for determining whether
contents of the transmission information are
displayable at a portable terminal owned by a
destination user;

10 sending means for sending the transmission
information to the portable terminal when said
determination means determines that the contents are
displayable;

15 decision means for deciding a destination of the
transmission information when said determination means
determines that the contents are not displayable;

conversion means for converting data contained in
the transmission information into a format suitable for
the destination; and

20 providing means for providing to the destination
data format-converted by said conversion means.

22. The system according to claim 21, wherein

the system further comprises division means for
dividing the data contained in the transmission
information, depending on types of data,

25 said designation means designates conversion such
that each data divided by said division means is
suitable for the format of the destination, and

said providing means integrates the respective data format-converted on the basis of the designation of said designation means and providing the resultant data to the destination.

5 23. The system according to claim 22, wherein the transmission information is electronic mail, and the data divided in accordance with the types are attached files contained in the electronic mail.

24. The system according to claim 21, wherein
10 the system further comprises user information retaining means for retaining user information containing information about the portable terminal and user information containing designation of the destination of the transmission information,

15 said determination means determines on the basis of the information about portable terminal registered in the user information whether the contents of the transmission information received by said reception means are displayable at the portable terminal owned by
20 the destination user, and

said decision means decides the destination of the transmission information as a destination designated by the user information when said determination means determines that the contents are
25 not displayable.

25. The system according to claim 21, further comprising notification means for notifying the

portable terminal of the destination user of a notification representing that data is transferred by said providing means.

26. An information providing method comprising:

5 the reception step of receiving transmission information to a user;

 the determination step of determining whether contents of the transmission information received in the reception step are displayable at a portable
10 terminal owned by the user;

 the sending step of sending the transmission information to the portable terminal when it is determined in the determination step that the contents are displayable;

15 the decision step of deciding on the basis of user information of the user a destination of the transmission information received in the reception step when it is determined in the determination step that the contents are not displayable;

20 the designation step of designating conversion such that data contained in the transmission information matches a format of the destination; and

 the providing step of providing to the destination data format-converted on the basis of
25 designation in the designation step.

27. The method according to claim 26, wherein the method further comprises the division step of

dividing the data contained in the transmission
information, depending on types of data,

in the designation step, conversion is designated
such that each data divided in the division step is

5 suitable for the format of the destination, and

in the providing step, the respective data
format-converted are integrated on the basis of the
designation in the designation step and the resultant
data is provided to the destination.

10 28. The method according to claim 27, wherein the
transmission information is electronic mail, and the
data divided in accordance with the types are attached
files contained in the electronic mail.

29. The method according to claim 26, wherein
15 the method further comprises the user information
retaining step of retaining user information containing
information about the portable terminal and user
information containing designation of the destination
of the transmission information,

20 it is determined in the determination step on the
basis of the information about portable terminal
registered in the user information whether the contents
of the transmission information received in the
reception step are displayable at the portable terminal
25 owned by the destination user, and

in the decision step, the destination of the
transmission information is decided as a destination

designated by the user information when it is determined in the determination step that the contents are not displayable.

30. The method according to claim 29 further comprising the setting step of setting the user information.

31. The method according to claim 26, further comprising the notification step of notifying the portable terminal of the destination user of a notification representing that data is transferred in the providing step.

32. The method according to claim 27, wherein in the designation step, a conversion module for each data obtained in the division step is selected on the basis of a format of each data and a data format of the destination, and the selected conversion module is made to convert the data.

33. The method according to claim 27, wherein in the providing step, the respective converted data are integrated in accordance with a data order of the transmission information.

34. The method according to claim 32, wherein when the destination is a World Wide Web information providing apparatus, in the conversion step, image data contained in the transmission information is converted into JPEG data and wordprocessor document data is converted into HTML data.

35. The method according to claim 32, wherein when the destination is a portable terminal, in the conversion step, image data contained in the transmission information is converted into a format displayable at the portable terminal and wordprocessor document data is converted into text string data representing abstract of the document.

36. The method according to claim 32, wherein when the destination is a portable terminal and the number of characters of a mail text contained in the transmission information exceeds the number of displayable characters of the portable terminal, in conversion step, the mail text is converted into data having the number of displayable characters.

37. The method according to claim 36, wherein in the conversion step, a character string is cut so that the number of characters of the mail text is not more than the number of displayable characters of the portable terminal.

38. The method according to claim 36, wherein in the conversion step, abstract from the mail text is prepared such that the number of characters of the mail text is not more than the number of displayable characters of the portable terminal.

39. The method according to claim 32, wherein when the destination is a facsimile machine, in the conversion step, mail text data, image data, and

wordprocessor document data contained in the transmission information are converted into facsimile data by CCITT FAX encoding.

40. The method according to claim 39, wherein

5 the method further comprises the cover page generation step of generating cover page data representing an address of a data destination, and

10 in the providing step, the cover page data is attached to the facsimile data obtained in the conversion step to obtain the output data.

41. The method according to claim 32, further comprising the charging step of, when conversion which accrues charge is executed in the conversion step, executing charge processing.

15 42. The method according to claim 41, further comprising the inhibiting step of, when a user sets to inhibit charge, inhibiting conversion which accrues charge.

20 43. The method according to claim 26, wherein when the destination is an apparatus for providing World Wide Web information, in the providing step, the output data accessible by a URL is retained.

25 44. The method according to claim 26, wherein when the destination is a portable terminal, in the providing step, the output data accessible by the portable terminal is retained.

45. The method according to claim 26, wherein when

the destination is a facsimile machine, in the providing step, the output data is transmitted to the facsimile machine.

46. An information providing method comprising:

5 the transmission step of transmitting desired information as transmission information;

the determination step of determining whether contents of the transmission information are displayable at portable terminal owned by a destination
10 user;

the sending step of sending the transmission information to the portable terminal when it is determined in the determination step that the contents are displayable;

15 the decision step of deciding a destination of the transmission information when it is determined in the determination step that the contents are not displayable;

the conversion step of converting data contained
20 in the transmission information into a format suitable for the destination; and

the providing step of providing to the destination data format-converted in the conversion step.

25 47. The method according to claim 46, wherein

the method further comprises the division step of dividing the data contained in the transmission

information, depending on types of data,

in the designation step, conversion is designated such that each data divided in the division step is suitable for the format of the destination, and

5 in the providing step, the respective data format-converted on the basis of the designation in the designation step are integrated and the resultant data is provided to the destination.

48. The method according to claim 47, wherein the
10 transmission information is electronic mail, and the data divided in accordance with the types are attached files contained in the electronic mail.

49. The method according to claim 46, wherein
the method further comprises the user information
15 retaining step of retaining user information containing information about the portable terminal and user information containing designation of the destination of the transmission information,

it is determined in the determination step on the
20 basis of the information about portable terminal registered in the user information whether the contents of the transmission information received in the reception step are displayable at the portable terminal owned by the destination user, and

25 in the decision step, the destination of the transmission information is decided as a destination designated by the user information when it is

determined in the determination step that the contents are displayable.

50. The method according to claim 46, further comprising the notification step of notifying the
5 portable terminal of the destination user of a notification representing that data is transferred in the providing step.

51. A computer-readable storage medium which stores a control program for causing a computer to execute an
10 information providing method comprising:

the reception step of receiving transmission information to a user;

the determination step of determining whether contents of the transmission information received in
15 the reception step are displayable at a portable terminal owned by the user;

the sending step of sending the transmission information to the portable terminal when it is determined in the determination step that the contents
20 are displayable;

the decision step of deciding on the basis of user information of the user a destination of the transmission information received in the reception step when it is determined in the determination step that
25 the contents are not displayable;

the designation step of designating conversion such that data contained in the transmission

information matches a format of the destination; and

the providing step of providing to the destination data format-converted on the basis of designation in the designation step.

- 5 52. A computer-readable storage medium which stores a control program for causing a computer to execute an information providing method comprising:

the transmission step of transmitting desired information as transmission information;

- 10 the determination step of determining whether contents of the transmission information are displayable at portable terminal owned by a destination user;

- the sending step of sending the transmission information to the portable terminal when it is determined in the determination step that the contents are displayable;
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- the decision step of deciding a destination of the transmission information when it is determined in the determination step that the contents are not displayable;
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the conversion step of converting data contained in the transmission information into a format suitable for the destination; and

- 25 the providing step of providing to the destination data format-converted in the conversion step.